| **21st Century Concept** | **Beginning (1)** | **Developing (2)** | **Proficient (3)** | **Transformative (4)** | **Row Score** |
| --- | --- | --- | --- | --- | --- |
| **Creativity & Innovation** | Students complete the project as demonstrated, using the provided data and reproducing the example product. | Students complete the project as demonstrated, using the provided data and including additional information on their project pages. | Students complete the project; using information and images they have gathered and created themselves, following the same structure as the example project. | Students complete the project; using information and images they have gathered and created themselves, and expanding the final project beyond what was discussed in the basic example. |  |
| **Communication & Collaboration** | Students create individual pages in the wiki. They do not demonstrate interaction with the works created by others. | Students create their own individual pages. They contribute comments about the works of others, but only to the extent required for successful project completion. | Students create their own individual pages. They contribute multiple comments about the works of others, beyond what is required for successful project completion. | Students create their own individual pages. They contribute extensive and constructive comments about the works of others, beyond what is required for successful project completion. They invite others to contribute to the wiki. |  |
| **Research & Information Fluency** | Students follow the guidelines given in the tutorials to locate and view the Web resources suggested in the project materials. They are able to add the example information to their wiki pages. | Students follow the guidelines given in the tutorials to locate and view the Web resources suggested in the project materials. They are able to independently identify at least one additional source of information that is relevant to the topic. | Students are able to initiate their own Web search to find information about the topic under study. They are able to independently evaluate whether a Web site has valid, useful information to contribute to their project, and they are able to extract the information they need from the source. | Students are able to gather, evaluate, and use information they find on the Web, as well as from other sources. They are able to integrate information they find into their project pages and present the results in a meaningful way to others, using a variety of different digital tools. |  |
| **Critical Thinking & Problem Solving** | Students are able to identify the steps they need to take in order to complete the example project. They are able to identify the questions they will be trying to answer by completing the project. They are involved in guided discussions about the project. | Students demonstrate an understanding of the essential question under investigation in the example project and they are able to pose additional related questions of their own that they would like to explore. They actively take part in guided discussions about the project. | Students are able to identify the essential question under investigation and pose relevant questions of their own. They are able to make informed decisions in order to effectively plan and implement strategies for finding possible solutions. They actively take part in guided discussions about the project and demonstrate the ability to also engage others. | Students are able to identify essential questions and problems for investigation, as well as demonstrate leadership in suggesting alternative ways to find, evaluate, and report possible solutions. They will actively engage others in discussions about the issues under investigation, both in and outside of the classroom. They demonstrate a willingness to listen to and explore different perspectives. |  |
| **Digital Citizenship** | Students are able to identify the source of the data that is used for the example project. With some help, students are able to identify “appropriate” and “inappropriate” examples of wiki content. | Students are able to identify and correctly cite the source of the data they use for their project. They are able to demonstrate the ability to follow up on investigating topics they are personally interested in. Students are able to identify “appropriate” and “inappropriate” examples of wiki content. | Students are able to express why it is important to accurately reference the source of the data they use for their project. They are able to make use of a variety of resources to further their own knowledge about a specific topic. Students are able to independently generate “appropriate” and “inappropriate” examples of wiki content for discussion. | Students are able to accurately cite and ethically use information gathered from Web resources. They are able to express how the use of digital tools can further their own learning, as well as support collaboration with others. Students are able to independently manage “appropriate” and “inappropriate” wiki content. |  |
| Rubric adapted from online Atomic Learning Resource 2009. | | | | | |
| **Technology Literacy** | Students are able to complete the example project in the demonstrated application with some guidance from others. | Students are able to independently complete the example project in the demonstrated application, as well as indicate an understanding of why the chosen application is appropriate for the project. With some guidance, they are able to troubleshoot any problems they encounter. | Students are able to independently complete the example project in the demonstrated application, as well as independently solve any problems they encounter. Students are able to select and use tools available in the application effectively and appropriately. | Students are able to demonstrate the ability to complete the example project in the chosen application. They are able to easily transfer knowledge to using other applications that are equally effective and appropriate tools for this project. They are able to independently solve any problems they encounter and help others do the same. |  |
| **Growth & Leadership** | Students require help to identify and pursue related areas of interest. They require help designing their own projects. They are reluctant to assume leadership roles. | Students are able to identify and pursue related areas of interest with some guidance from the teacher. They are able to identify elements of project design, but require help putting it all together. They will assume leadership roles that have been clearly defined. | Students are able to identify and pursue related areas of interest, as well as begin designing their own projects that utilize the same skills they have learned by completing other, similar learning activities. They are able to assume leadership roles. | Students will pursue related areas of interest independently, and design projects of their own that demonstrate learned skills, as well as design projects that require the acquisition of new skills. They will seek out ways to demonstrate leadership in a variety of different situations. |  |
|  |  |  |  | **Total Score:** |  |

Atomic Learning, Inc. (2009). 21st century skills project guide: 21st century skills assessment rubric. Retrieved from http://www.atomiclearning.com/k12/21st\_mathmindmaps